We claim:

1. A method for transforming a plant with a transgene, comprising the steps of:

a. culturing an intact explant of the plant in nutritive medium;

b. electroporating the explant with a pulse length of at least about 50 milliseconds to produce a transformed explant;

wherein the transgene is stably integrated into a chromosome of a cell of the transformed explant.

2. The method of claim 1, wherein the pulse length is from about 90 to about 300 milliseconds.

3. The method of claim 1, wherein the pulse length is from about 90 to about 250 milliseconds.

4. The method of claim 1, wherein the pulse length is from about 90 to about 200 milliseconds.

5. The method of claim 1, wherein the pulse length is from about 90 to about 150 milliseconds.

6. The method of claim 1, wherein at least two transgenes are electroporated in step b.

7. The method of claim 1, wherein a marker gene is also electroporated in step b.

8. The method of claim 6, wherein a marker gene on a separate DNA molecule is also electroporated in step b.

9. A method of producing a transgenic plant comprising the steps of:

a. culturing an intact explant of a plant in nutritive medium;

b. electroporating the explant with a pulse length of from about 50 to about 500 milliseconds to produce a transformed explant, wherein the transgene is stably integrated into a chromosome of a cell of the transformed explant; and

c. regenerating the transgenic plant from said transformed explant.

10. The method of claim 9, wherein the pulse length is from about 90 to about 300 milliseconds.

11. The method of claim 9, wherein the pulse length is from about 90 to about 250 milliseconds.

12. The method of claim 9, wherein the pulse length is from about 90 to about 200 milliseconds.

13. The method of claim 9, wherein the pulse length is from about 90 to about 150 milliseconds.

14. The method of claim 9, wherein at least two transgenes are electroporated in step b.

15. The method of claim 9, wherein a marker gene is also electroporated in step b.

16. The method of claim 9, wherein a marker gene on a separate DNA molecule is also electroporated in step b.

17. The method of claim 16, wherein the transgenic plant lacks the marker gene.

18. The method of claim 16, wherein the marker gene is the IPT gene.

19. The method of any of claims 1-18 wherein the plant is selected from the group consisting of monocots, dicots, and gymnosperms.

20. The method of claim 19 wherein the plant is selected from the group consisting of chrysanthemum, petunia, and rose.

21. A transgenic plant produced by the method of any of claims 1-18.

22. A transgenic plant produced by the method of claim 19.

23. A transgenic plant produced by the method of claim 20.

24. A method of producing a transgenic plant lacking a marker gene, comprising the steps of:

a. culturing intact plant tissue;

b. transforming the plant tissue with a transgene and a stimulatory gene, wherein the trait gene and the stimulatory gene are on separate nucleic acid molecules, to produce transformed plant tissue, wherein the transgene is stably integrated into a chromosome of a cell of the transformed plant tissue, and wherein the stimulatory gene is present in at least one cell of the plant tissue;

c. regenerating transgenic plants from said transformed plant tissue; and

d. selecting transgenic plants which lack the stimulatory gene.

25. The method of claim 24, wherein the transformation of step b. is performed by a method selected from the group consisting of agrobacterium-mediated transformation, the gene gun, magnetophoretic delivery, immobilization of the nucleic acids on silicon fibers, and microinjection of nucleic acids.

26. The method of claim 24, wherein the stimulatory gene is selected from the group consisting of IPT and genes involved in the biosynthesis plant growth regulators.

27. The method of claim 26, wherein the stimulatory gene is IPT.